

CALIBRATE AND INSTALL ADDITIONAL METERS

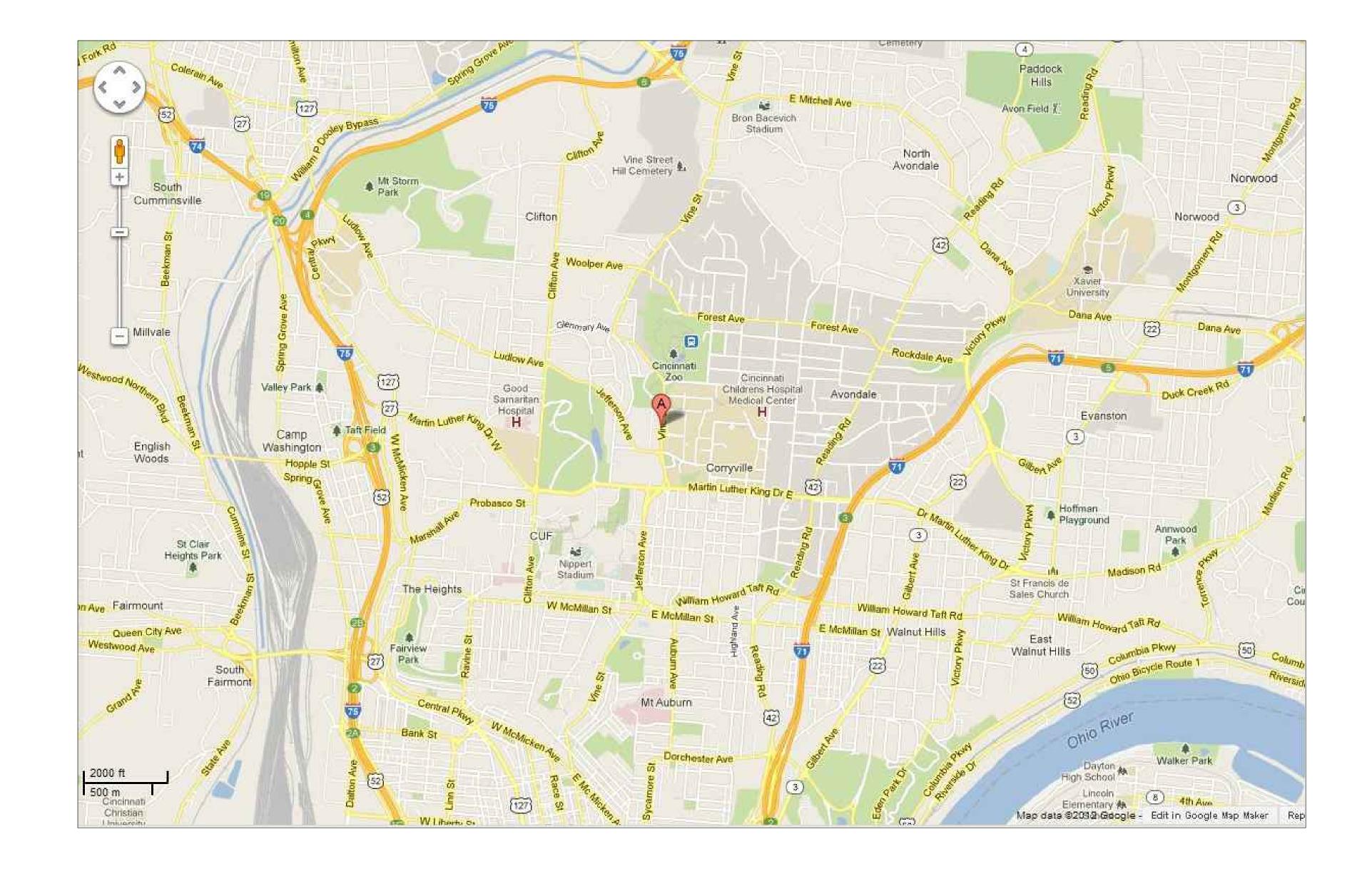
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER 3200 VINE STREET
CINCINNATI, OHIO 45220



VA Project No: 539-15-204 Firm License: 01528

CONSULTANTS:

Revisions







Drawing Title

Approved: Project Director

COVER SHEET

CALIBRATE AND INSTALL ADDITIONAL METERS

Location Cincinnati, Ohio

DLE

VA Project No. 539-15-204

Building Number

Call

Drawing Number

CO00

Office of
Construction
and Facilities
Management
Department of
Veterans Affairs

GARY
EOD
E-52

**REGIS

IOTES:

METER TOTAL USAGE SHALL BE RECORDED FOR TIME PERIODS INDICATED IN SCHEDULE. METER USAGE DATA ACQUISITION SHALL NOT OCCUR UNTIL AFTER METER HAS BEEN RE-CALIBRATED (WHERE APPLICABLE) AND REINSTALLED (WHERE RE-CALIBRATION REQUIRES METER REMOVAL). PROVIDE REPORT TO COR, DETAILING RESULTS OF ALL METER DATA ACQUISITION, INCLUDING OUTCOME OF MEETINGS WITH UTILITY PROVIDER, WHERE APPLICABLE. REPORT SHALL INCLUDE SCREEN SHOTS OF METER READINGS AT BEGINNING AND END OF DATA ACQUISITION PERIODS FOR ALL METERS.

EXISTING METER SCHEDULE - ONICON											
MARK	LOCATION	METER TYPE	SYSTEM AND/OR SERVICE	MODEL NUMBER	SERIAL NUMBER	RE-CALIBRATE METER	DATA ACQUISITION PERIOD (NOTE 1)	SIMULTANEOUS DATA ACQUISITION	SECONDARY DATA ACQUISITION F (NOTE 1)	ERIOD SIMULTANEOUS DATA ACQUISITION	DATA ACQUISITION REQUIRED
31	BUILDING 13 NORTH	INSERTION TURBINE FLOW WITH BTU MEASUREMENT	CAMPUS SECONDARY CHILLED WATER	F-1110 / SYSTEM 10	170597	YES	ONE CONTIGUOUS MONTH BETW JUL. 1ST AND AUGUST 31ST		ONE CONTIGUOUS MONTH BETWEEN MAY 31ST OR BETWEEN SEP. 1ST A		, FLOW (GAL) ENERGY (BTU)
86	BUILDING 2 (CLC) CRAWL SPACE / BASEMENT	INSERTION TURBINE FLOW WITH BTU MEASUREMENT	CLC CHILLED WATER	F-1110 / SYSTEM 10	227402	YES	ONE CONTIGUOUS MONTH BETW JUL. 1ST AND AUGUST 31ST		ONE CONTIGUOUS MONTH BETWEEN MAY 31ST OR BETWEEN SEP. 1ST A		FLOW (GAL) ENERGY (BTU)
100	BUILDING 1 BASEMENT C-SECTION MECH. ROOM	INSERTION TURBINE FLOW WITH BTU MEASUREMENT	AHU-27 CHILLED WATER	F-1220	169977	YES	N/A	N/A	N/A	N/A	N/A

NOT

SERIAL NUMBER | RE-CALIBRATE

METER TOTAL USAGE SHALL BE RECORDED FOR TIME PERIODS INDICATED IN SCHEDULE. METER USAGE DATA ACQUISITION SHALL NOT OCCUR UNTIL AFTER METER HAS BEEN RE-CALIBRATED AND REINSTALLED (WHERE RE-CALIBRATION REQUIRES METER REMOVAL). PROVIDE REPORT TO COR, DETAILING RESULTS OF ALL METER DATA ACQUISITION. REPORT SHALL INCLUDE SCREEN SHOTS OF METER READINGS AT BEGINNING AND END OF DATA ACQUISITION PERIODS FOR ALL METERS.

	EXISTING METER SCHEDULE - SPIRAX SARCO									
MARK	LOCATION	METER TYPE	SYSTEM AND/OR SERVICE	MODEL NUMBER	SERIAL NUMBER	RE-CALIBRATE METER	DATA ACQUISITION PERIOD / SIMULTANEOUS DATA (NOTE 2) ACQUISITION	SECONDARY DATA ACQUISITION / SIMULTANEOUS PERIOD DATA ACQUISITION (NOTE 2)	DATA ACQUISITION REQUIRED	
81	BUILDING 1 GROUNDS MAINTENANCE STORAGE RM.	ULTRASONIC WITH BTU MEASUREMENT	AHU-21 CHILLED WATER	UTM10-ED102	92410	(NOTE 1)	ONE CONTIGUOUS MONTH BETWEEN / 3, 24, 27a, 31, JUL. 1ST AND AUGUST 31ST / 60, 86, 59	ONE CONTIGUOUS MONTH BETWEEN APR. 1ST AND /3, 24, 27a, 31, MAY 31ST OR BETWEEN SEP. 1ST AND OCT. 31ST / 60, 86, 59	, FLOW (GAL) ENERGY (BTU)	

MODEL NUMBER

DP 014-250-40

EXISTING METER SCHEDULE - McCROMETER

AND/OR SERVICE

CAMPUS MAIN

STEAM SUPPLY

METER TYPE

DIFFERENTIAL PRESSURE

FLOW METER

1 METER IS OWNED BY THE UNIVERSITY OF CINCINNATI - NO CALIBRATION REQUIRED.

NOTES:

Date

Revisions

1 METER WAS RECENTLY REPLACED OR RECALIBRATED - RECALIBRATION NOT REQUIRED.

MARK

LOCATION

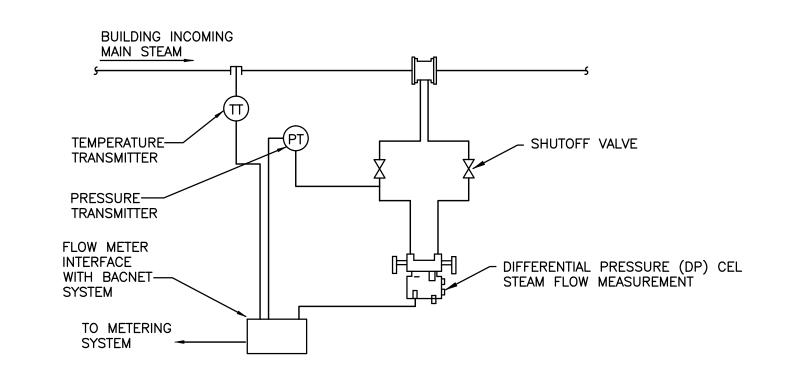
2 METER TOTAL USAGE SHALL BE RECORDED FOR TIME PERIODS INDICATED IN SCHEDULE. PROVIDE REPORT TO COR, DETAILING RESULTS OF ALL METER DATA ACQUISITION. REPORT SHALL INCLUDE SCREEN SHOTS OF METER READINGS AT BEGINNING AND END OF DATA ACQUISITION PERIODS

NEW INLINE VARIABLE AREA STEAM METER SCHEDULE											
MARK	LOCATION	SHEET	SYSTEM AND/OR SERVICE	MAX. LOAD LB/HR	OUTPUT SIGNAL	LINE PRESSURE PSIG	FLOW RANGE LB/HR	MINIMUM TURNDOWN	METER SIZE IN.	PIPE SIZE	NOTES
1-SSM6	BLDG. 1 SUB-BSMT. SERVICE ROOM	1-10SB	AHUs-13, 14, 15, 16	1,794	4-20mA AND PULSE	30	33-3,251	100:1	3"	3"	1
3-SSM1	BUILDING 3 SUB-BASEMENT	3-10SB	BUILDING 3 STEAM SUPPLY	1,200	4-20mA AND PULSE	120	14-1,385	100:1	2"	2.5"	1
				-							

RESPONSIBILITIES.

NOTES:

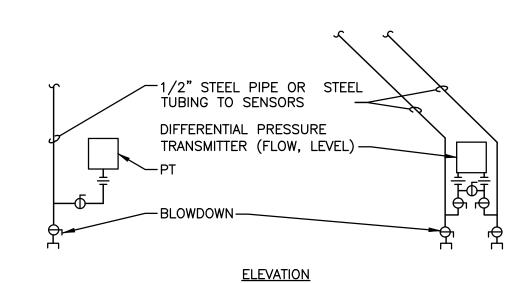
1 CONTRACTOR SHALL COORDINATE POWER & SIGNAL REQUIREMENTS WITH METER MANUFACTURER.



NOTE:

1. MAINTAIN UPSTREAM AND DOWN STREAM DISTANCES RECOMMENDED BY METER MANUFACTURERS

STEAM METER DETAIL



NOTES:

1. INSTALLATION OF SENSORS AND TRANSMITTERS SHALL CONFORM TO RECOMMENDATIONS OF MANUFACTURERS OF TRANSMITTERS.

PRESSURE TRANSMITTER INSTALLATION

Approved: Project Director

Drawing Title

GENERAL NOTES

1. THESE NOTES APPLY EQUALLY TO THE FULL SET OF DOCUMENTS.

2. SITE VISIT(S) SHALL BE AS OUTLINED IN PROJECT SPECIFICATIONS.

3. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS WILL APPLY CONTINUOUSLY AND NOT

BE LIMITED TO NORMAL WORKING HOURS. SEE SPECIFICATIONS FOR MORE SPECIFIC DETAILS ON

- 4. ALL WORK MUST BE COORDINATED WITH THE CONTRACTING OFFICER AND C.O.R. TO MAINTAIN OPERATION OF THE EXISTING FACILITY.
- 5. EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHERS. HE SHALL KEEP HIMSELF INFORMED OF THE PROGRESS AND DETAIL DEVELOPMENT OF THE WORK OF OTHERS AND SHALL BE RESPONSIBLE FOR COORDINATING AND EXPEDITING HIS WORK WITH OTHERS SO THAT THE PROGRESS OF THE TOTAL WORK SHALL BE KEPT ON SCHEDULE.
- 6. ALL WORK SHALL BE PERFORMED IN COMPLETE COMPLIANCE WITH ALL GOVERNING CODES AND STANDARDS.
- 7. EXISTING CONDITIONS SHOWN HAVE BEEN BASED UPON VISUAL OBSERVATION AND/OR AVAILABLE DRAWING INFORMATION, AND MAY BE AT VARIANCE WITH ACTUAL WORK IN PLACE. THE CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND FIELD VERIFY ALL CONDITIONS AFFECTING THE EXECUTION OF THE WORK. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE WORK SHOWN ON THE CONTRACT DOCUMENTS WHICH MAY IMPACT THE PROGRESS OF THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IN WRITING FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- 8. EACH CONTRACTOR AND/OR TRADE, FITTING OR PLACING HIS WORK INTO OR ON THE WORK OF OTHERS DOES SO WITH THE UNDERSTANDING THAT THE INSTALLATION OF HIS WORK CONSTITUTES HIS ACCEPTANCE OF THE SUITABILITY OF THE WORK IN PLACE. IF THE WORK OF OTHERS IS NOT ACCEPTABLE, HE SHALL NOTIFY THE C.O.R. AND SUCH WORK SHALL BE CORRECTED. ANY NEW WORK INSTALLED IN UNSUITABLE EXISTING WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR TRADE INSTALLING THE NEW WORK. NO CLAIMS FOR ADDITIONAL COMPENSATION FOR CORRECTING WORK INSTALLED IN UNSUITABLE EXISTING CONDITIONS WILL BE CONSIDERED.
- 9. ALL PRESSURES LISTED ARE GAGE PRESSURE UNLESS OTHERWISE NOTED.
- 10. ALL CUTTING AND PATCHING REQUIRED FOR THIS PROJECT SHALL BE INCLUDED IN THE CONTRACT. REFINISH ANY SURFACE DISTURBED UNDER THIS WORK TO MATCH EXISTING.
- 11. ANY REMOVED EQUIPMENT SHALL BE TURNED OVER TO THE VA. ITEMS NOT DESIRED BY THE VA SHALL BE REMOVED FROM THE PREMISES AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- 12. FIELD VERIFY EXISTING CONDITIONS, INCLUDING DUCT, PIPE AND EQUIPMENT SIZES, SERVICES AND LOCATIONS PRIOR TO PERFORMING WORK.
- 13. WHERE EXISTING HVAC UTILITIES IN SERVICE WILL BE DISRUPTED DURING THE CONSTRUCTION OF THIS PROJECT, THIS WORK SHALL BE PERFORMED ON WEEKENDS OR WEEK NIGHTS. DOWNTIME SHALL BE KEPT TO A MINIMUM, AND SHALL BE COORDINATED AND SCHEDULED WELL IN ADVANCE WITH COR.
- 14. ALL SYSTEM SHUT-DOWN REQUESTS SHALL BE PRESENTED TO COR 21 DAYS PRIOR TO REQUESTED SHUT-DOWN

INDEX OF DRAWINGS								
SHEET	DESCRIPTION							
C000	COVER SHEET							
M601	INDEX, SCHEDULES, DETAILS, GENERAL NOTES							
1-10SB	BUILDING 1 SUB-BASEMENT FLOOR PLAN							
1-10B	BUILDING 1 BASEMENT FLOOR PLAN							
2-10B	BUILDING 2 BASEMENT FLOOR PLAN							
3-10B	BUILDING 3 BASEMENT FLOOR PLAN							
8-101	BUILDING 8 BASEMENT FLOOR PLAN, BUILDING 13 FIRST FLOOR PLAN							
15-10B	BUILDING 15 BASEMENT FLOOR PLAN							

CONSULTANTS:

ARCHITECT/ENGINEERS:

GARY S.
EODICE
E-52755

Nation
1400 V

Heapy Engineering

MEP Design Technology Planning Commissioning Energy

Nationally Recognized Leader in Sustainability

1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com

PROJECT NO. 2013-04026

FIRM LICENSE: 01528

INDEX, SCHEDULES, DETAILS, GENERAL NOTES CALIBRATE AND INSTALL
ADDITIONAL METERS

- VA Project No. 539-15-204

Building Number

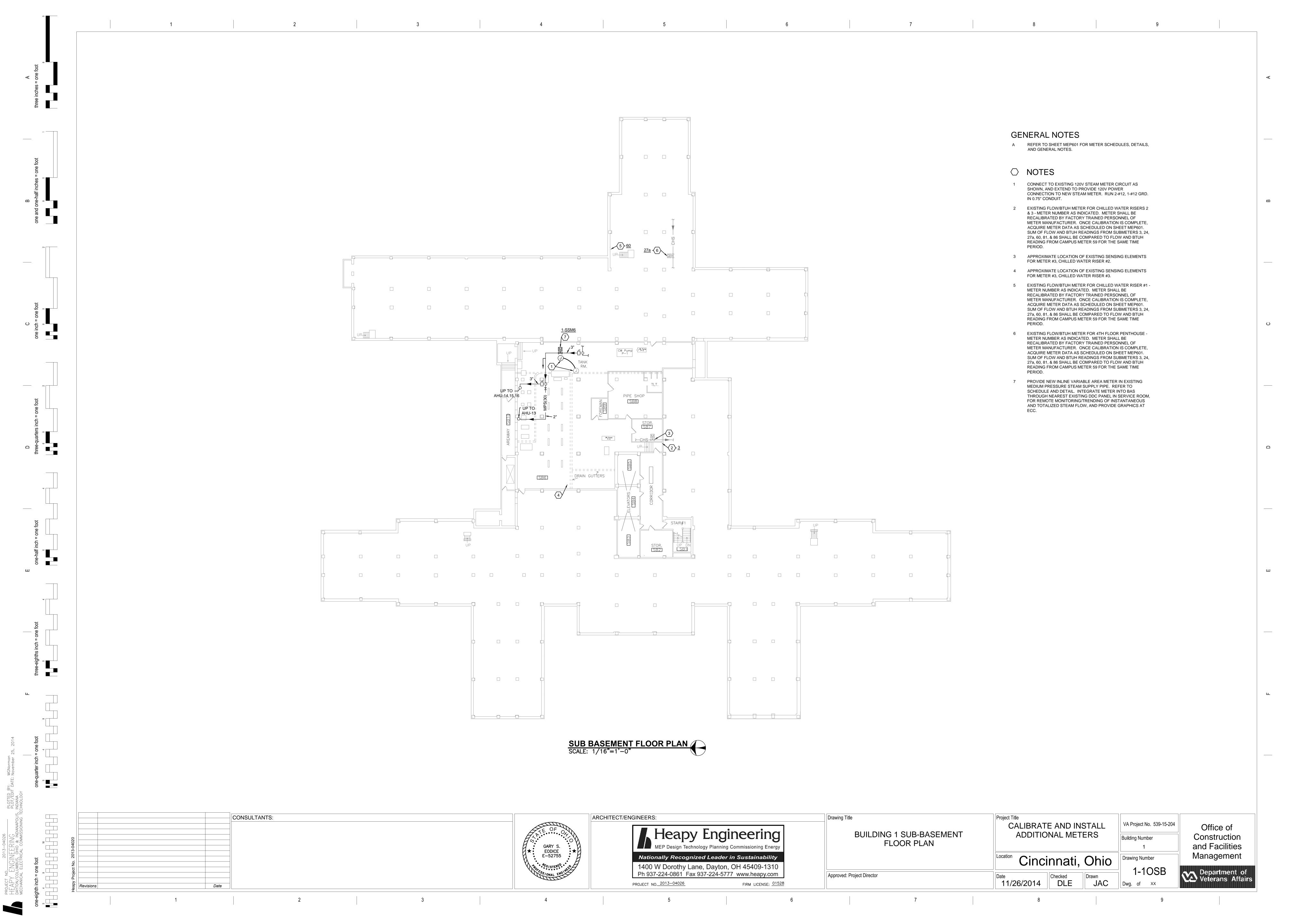
Office of Construction and Facilities Management

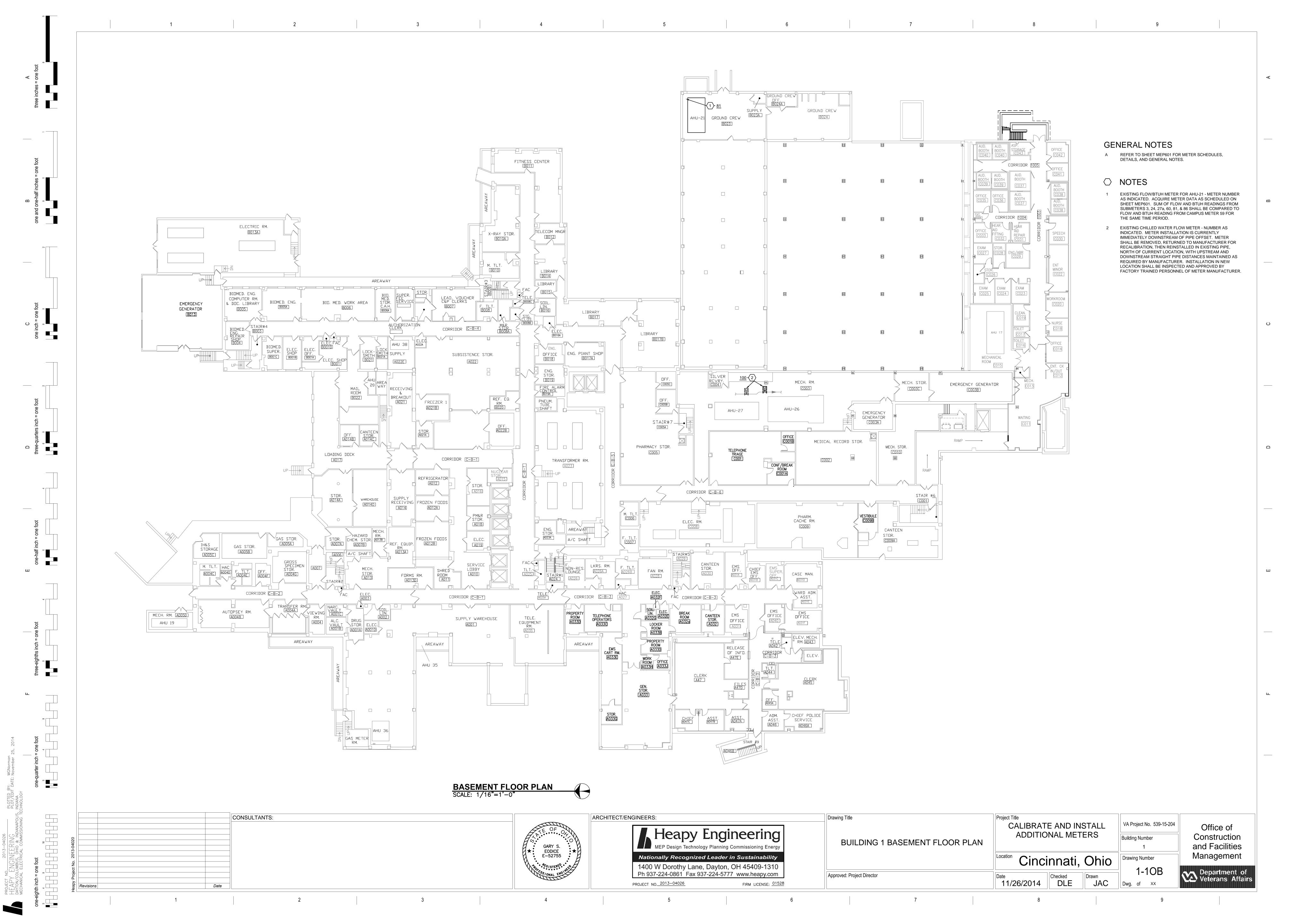
Date 11/26/2014 Checked Drawn JAC

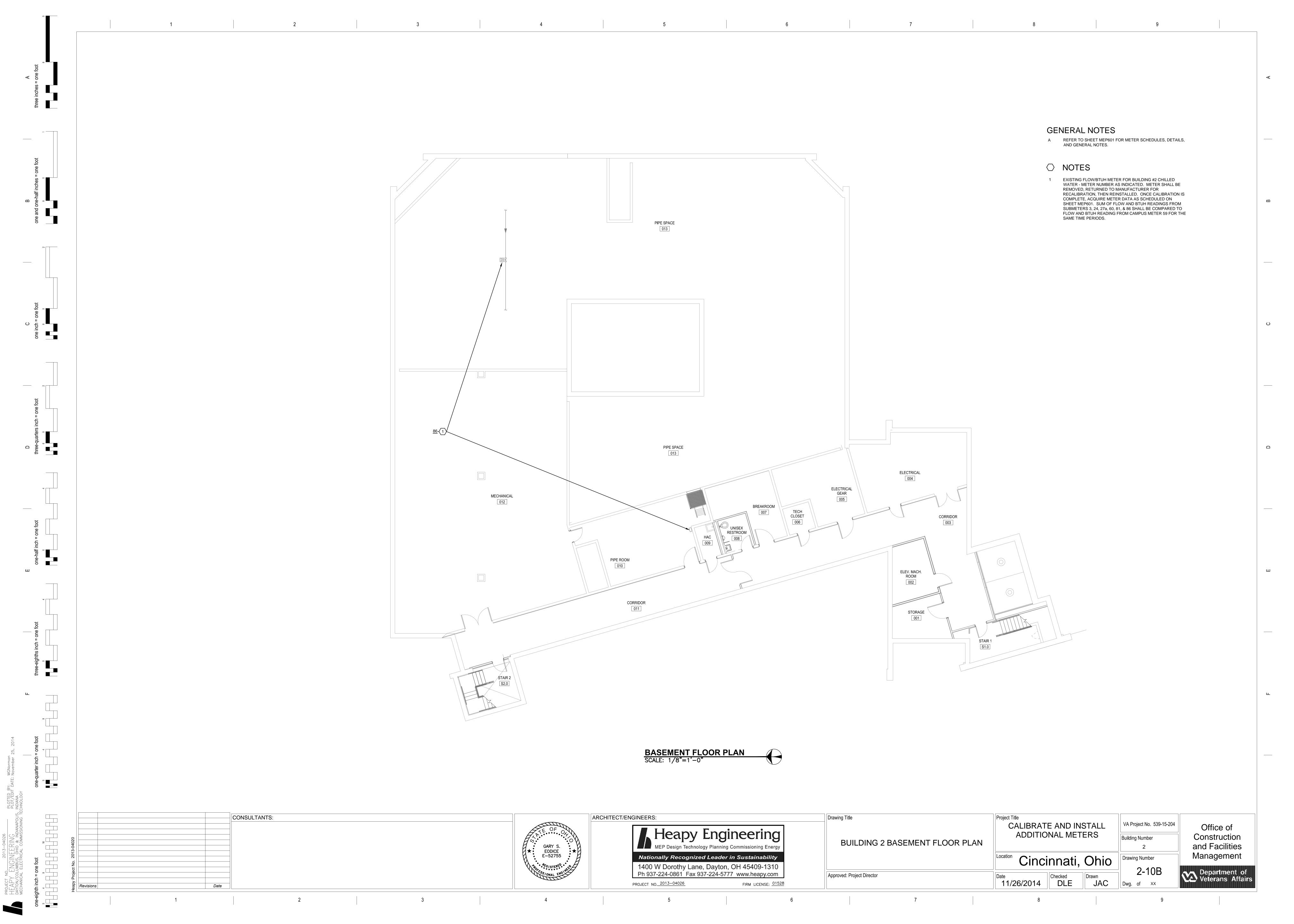
Drawing Number

M601

Department of Veterans Affairs







GENERAL NOTES

A REFER TO SHEET MEP601 FOR METER SCHEDULES, DETAILS, AND GENERAL NOTES.

○ NOTES

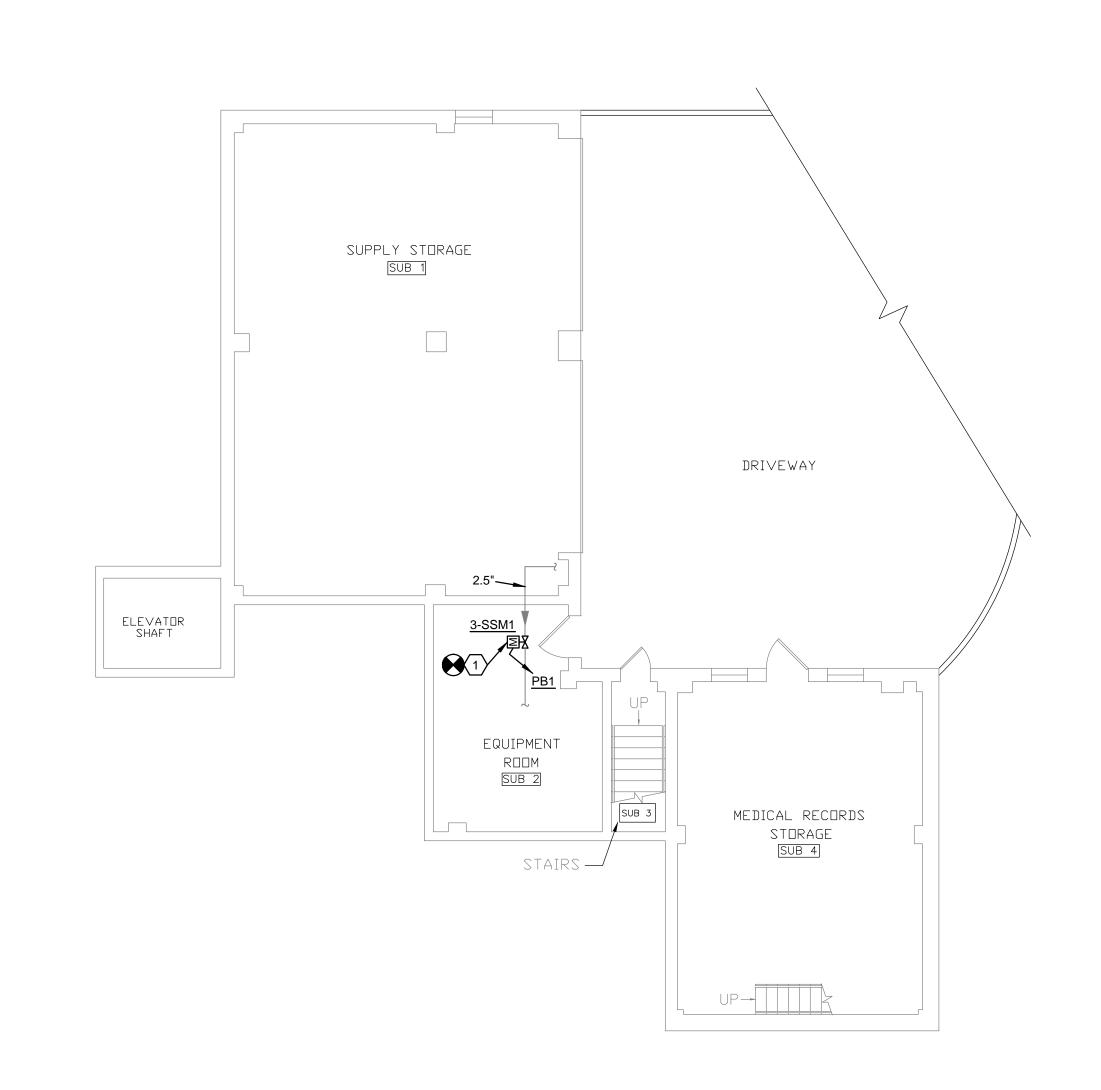
PROVIDE NEW INLINE VARIABLE AREA METER IN EXISTING HIGH PRESSURE STEAM SUPPLY PIPE. REFER TO SCHEDULE AND DETAIL. INTEGRATE METER INTO BAS THROUGH NEW NETWORK AREA PANEL IN BASEMENT ELECTRICAL ROOM, FOR REMOTE MONITORING/TRENDING OF INSTANTANEOUS AND TOTALIZED STEAM FLOW, AND PROVIDE GRAPHICS AT ECC. UTILIZE EXISTING 20A/1P BREAKER IN EXISTING BRANCH CIRCUIT PANEL AND RUN 2-#12 & 1-#12 GRD. IN 0.75"

PROVIDE NETWORK AREA CONTROL PANEL, FOR INTEGRATION OF NEW STEAM METER. MOUNT PANEL ON WALL IN EXISTING ELECTRICAL ROOM. EXTEND AND CONNECT CAT 5E NETWORK CABLE FROM PANEL TO EXISTING VA NETWORK SWITCH IN THIS ROOM. PROVIDE A MINIMUM 21 DAYS NOTICE TO COR, IN ADVANCE OF ANTICIPATED CONNECTION TO NETWORK SWITCH AND NEED FOR IP ADDRESS. UTILIZE EXISTING 20A/1P BREAKER IN EXISTING BRANCH CIRCUIT PANEL AND RUN 2-#12 & 1-#12 GRD. IN 0.75" CONDUIT.

3 EXISTING SQUARE-D PANEL TO REMAIN.

CONDUIT. \Box ffice > 008 □ffice □ffice 009 HR □ffice LOBBY HR Office HR Office VESTIBULE
014 ELEVATOR EQUIPMENT COPIER 012 ELECTRICAL UPPER PART DF MEDICAL RECDRDS STORAGE BREAK ROOM 001A Conference ROOM PIPE BASEMENT 001B

PARTIAL BASEMENT FLOOR PLAN
SCALE: 1/8"=1'-0"



PARTIAL SUB-BASEMENT FLOOR PLAN
SCALE: 1/8"=1'-0"

CONSULTANTS:

GARY S. EODICE E-52755

ARCHITECT/ENGINEERS: Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com PROJECT NO. 2013-04026 FIRM LICENSE: 01528

BUILDING 3 FLOOR PLANS Approved: Project Director

Drawing Title

CALIBRATE AND INSTALL ADDITIONAL METERS Cincinnati, Ohio

Checked DLE

VA Project No. 539-15-204 Drawing Number

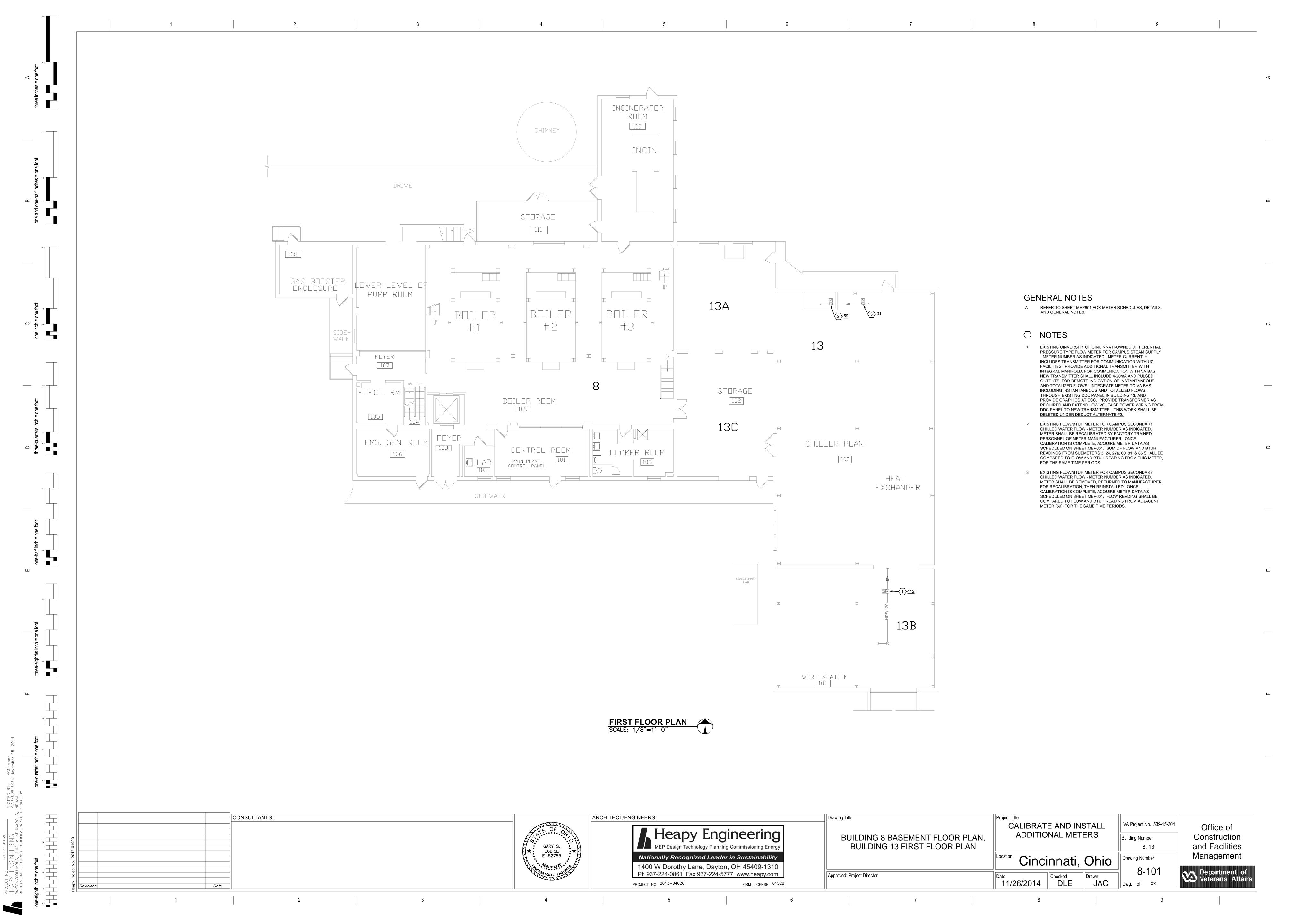
Management Department of Veterans Affairs

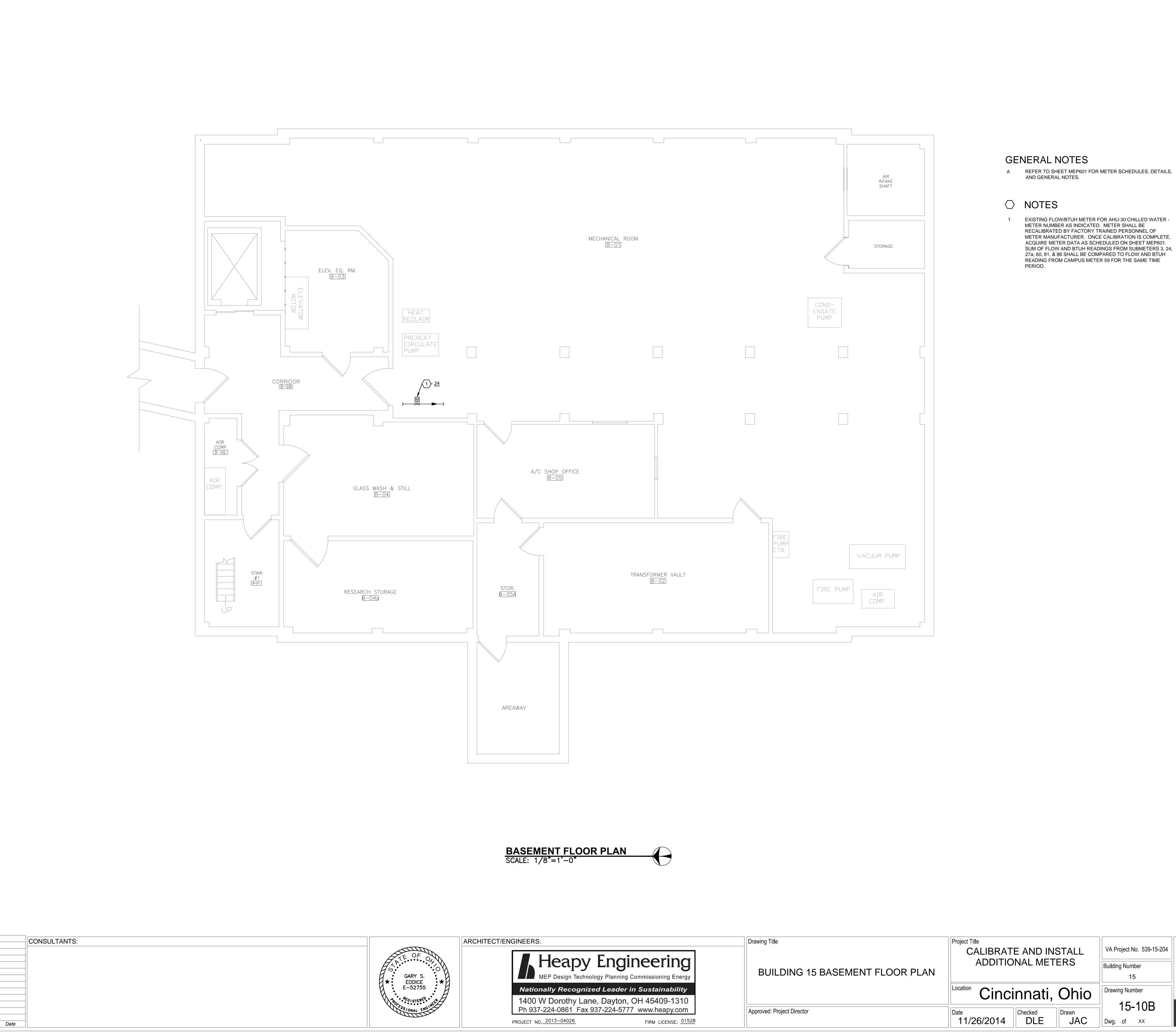
Office of

Construction

and Facilities

Revisions





Office of

Construction

and Facilities

Management

Department of Veterans Affairs

Revisions